



(12) PATENT ABSTRACT

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(54) PORTABLE EMERGENCY TRAFFIC LIGHTS

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(57) Claim

1. A portable traffic light including a base,, a substantially vertical member removably located by said base and means for controlling the display of appropriate traffic control lights in one or more directions, said light being powered by a detachable energy source integral with said traffic light..

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Complete Specification for the invention entitled:

PORTABLE EMERGENCY TRAFFIC LIGHT

The following statement is a full description of this invention including the best method of performing it known to me:-

This invention relates to an emergency traffic light apparatus particularly suitable for use at intersections and other locations where traffic control is required.

One of the principal objects of modern traffic engineering is to ensure the flow of motor vehicular traffic is as smooth as possible. This flow is unavoidably disrupted at intersections, however the use of traffic lights has greatly facilitated the minimal interruption of traffic movement. It has been found that if the traffic light
10 becomes inoperative for some reason, considerable congestion results at the intersection in question. Traffic lights may become inoperative due to power failures, malfunctions or damage caused by motor vehicle accidents.

My invention provides for a portable emergency traffic light which may be stored at some convenient location such as the local police station for prompt installation in the intersection concerned as a temporary measure to keep traffic flowing. A further object of my invention is to provide a portable emergency traffic light which is self supporting,
20 contains its own power supply and which is adaptable to cope with the traffic demands of the intersection in question. This may include means to adjust the timing of the signals in the respective directions, multiple heads and alternative power sources.

In accordance with my invention therefore there is provided a portable traffic light including a base, a substantially vertical member removably located by said base and means for controlling the display of appropriate traffic control lights in one or more directions, said light being
30 powered by a detachable energy source integral with said traffic light.

A preferred embodiment of my invention will now be described with reference to the accompanying drawings, in which:

Fig. 1 is an exploded perspective view,

Fig. 2 is a perspective view of an alternative head, Fig. 3 is a vertical section of the socket joint, and Fig. 4 represents a base weight.

In this embodiment of my invention there is provided a circular steel base -10 weighing approximately 23 kilograms to which may be added any number of base weights 11 of approximately 20 kilos each. The base may also accommodate a 12 volt battery 12 which is connected to a circuit within the stem 13 of the base by appropriate leads (not shown). The upper end of the stem provided within the base is provided with female electrical sockets 14 adapted to connect with a male coupling 17 provided in the lower end 15 of the post 16 which is adapted to fit over and be supported by the stem 13 mounted on the base. Any number of identical posts, which preferably are 1.2 metres long, may be added as desired prior to placement of the traffic light head 18 on top of the highest post. As shown in the drawings the head may comprise of one standard four-way lighting system or alternatively may comprise one or more swing adjustable heads 19, 20 suitable for Y intersections and the like. In a further variation, a swing head may be used in conjunction with a standard four-way head.

The coupling between the posts is waterproof and the structure may be readily assembly on site merely by pushing the first post onto the base, the second post onto the first post and a traffic light head onto the upper end of the upper post. When coupled to the power supply and on adjustment of the microprocessor or other traffic light sequence control means (not shown), a cheap robust and reliable portable emergency traffic light can be quickly put into operation by the relevant traffic authorities.

It is envisaged that only one emergency traffic light would be installed at any given intersection due to the difficulty of linking associated light structures to sequentially govern traffic movement at one particular

intersection. It is further envisaged that the traffic light be sufficiently portable and dismantable to be put in the boot of a police car for prompt transportation and erection at a desired intersection. Energy to power the traffic lights is provided by a standard 12 volt car battery mounted on the base of the structure and connected to a wiring loom integral with the said demountable stem and traffic light head.

The claims defining the invention are as follows:-

1. A portable traffic light including a base, a substantially vertical member removably located by said base and means for controlling the display of appropriate traffic control lights in one or more directions, said light being powered by a detachable energy source integral with said traffic light.
 2. A portable traffic light as claimed in claim 1 wherein said means comprise a microprocessor controlling a traffic light head, said head being provided with means for the display of appropriate red, yellow and green traffic control lights.
 3. A portable traffic light as claimed in claim 1 wherein said means comprise a microprocessor controlling two or more unidirectional traffic light heads, said heads being rotatable with respect to each other about the said vertical member.
 4. A portable traffic light as claimed in any one of the preceding claims wherein said energy supply comprises an electrical battery, said battery being linked to said control means by means of connecting means integral with said vertical member.
 5. A portable traffic light substantially as herein described and with reference to the accompanying drawings.
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